

proper backing can be secured, moral and financial, they think that a botanical congress can be made highly successful in all respects. The greatest difficulty which they have met so far has been — *your* indifference.

ANOTHER MATTER of great interest to botanical science is the proposed division of section F of the A. A. A. S. This proposal the GAZETTE opposed when it was made several years ago. We have seen reason to change our minds. Editorially and through the letter of Dr. Halsted, we have endeavored to find out how others regarded the proposition, but we have been unable to extract a single opinion, pro or con. So far as expression of their sentiments is concerned, the botanists might as well be dead!

CURRENT LITERATURE.

A manual of grasses.¹

The study of the grasses of the United States has long been one of the special functions of the Botanical Division of the Department of Agriculture, and a vast amount of material has been accumulated in the National Herbarium. For many years Dr. George Vasey has been making this great collection of grasses his special care, and his various papers from time to time have testified to his critical study. It has been felt for a number of years that he should put the results of his labors in monograph form, so that botanists in general might share his wide knowledge. In answer to this demand, Volume III of "Contributions from the National Herbarium" opens with the first part of a "Monograph of the Grasses of the United States and British America." The second part, completing the monograph, is promised in a few months. The monograph is in regular manual style, with suitable keys, and a full index which includes synonymy. The author has done a good service to American botany in bringing together our scattered accounts of North American grasses, and the monograph will undoubtedly stimulate the wider study of this very important and very critical group. The Department, as well as the Botanist, is to be congratulated upon the evident desire to cultivate botany for its own sake, and to use some of its money and material in rendering service to the botanical world, as well as to purely agricultural interests.

¹VASEY, DR. GEO. — Monograph of the Grasses of the United States and British America. Contributions from the U. S. National Herbarium, Vol. III, No. 1, pp. xiv, 89. Issued, Feb. 25, 1892. Government Printing Office, Washington.

Thin wood sections.

The usefulness of well prepared transparent sections of various kinds of woods for numerous instructive and illustrative purposes, is conceded by every one, and by no one more than by the person who has had the privilege of using them. About ten years ago Mr. Henry Brooks, of Boston issued a set of seventeen species of woods, each species represented by three sections, a radial, a tangential and a transverse one, neatly mounted upon cards behind mica slips. Somewhat later a larger set, representing about 200 species of woods, mounted much in the same manner, was prepared by Charles W. Spurr, of Boston, under the direction of Dr. C. S. Sargent, using material from the "Jesup collection" of the Central Park museum, New York. Only a limited number of this set was issued.

There is now in course of publication a third set of wood sections.¹ These are prepared and mounted in a similar manner to those of the preceding sets, except that mica facing is not used, and that a number of minor details are added to increase their usefulness. A new feature of much importance is a well arranged accompanying text.

The author is Mr. Romeyn B. Hough, son of the late Franklin B. Hough, who was for some time U. S. Commissioner of Forestry, and throughout a long life was a student of our native ligneous flora, being the author of a treatise on the "Elements of Forestry," and of numerous other works of a kindred nature. The son has inherited his father's love of the forests, and he has entered into the preparation of the present work with the rich accumulations of information at hand brought together by his father, and with a strong personal enthusiasm.

The work is to be issued in parts of twenty-five species each, each part with a suitable text. The parts will appear as rapidly as they can be prepared, and the whole work is expected to eventually embrace all the most important woods of the United States. Two parts are already issued. The price is five to ten dollars per part according to the style of binding.

The work has a scientific and economic interest, both of which features are admirably met by the accurate naming and preparation of the material and by the extended and important information given in the text. The form in which the work is put up is very ingenious and handy, each part making a volume resembling an ordinary book, although the sections are upon free cards.

¹ HOUGH, ROMEYN B.—The American woods, exhibited by actual specimens and with copious explanatory text. Lowville, N. Y., pub. by the author. 8vo. Pt. I, 1888. pp. vii+79. figs. 42. 27 cards bearing three wood sections each. Pt. II, 1891.

A large series of lantern slides of wood sections is also prepared by the author, and sold separately. They make particularly beautiful and instructive objects for class use. Untreated wood-section cards of all sizes up to $4\frac{1}{2}$ by 6 inches are also made. They have a fine ivory-like appearance, and may be used for a great variety of useful and decorative purposes.

The Oak.¹

Looked at as an independent treatise, we have in this book a succinct account of the development, anatomy and economic relations of the English oak, forming a compact little volume that will be useful to every student of forest biology. Space limitations have sometimes necessitated a lack of fulness in statement that tends to obscurity, but in the main the work is good, clearly put, and accurate.

The Modern Science Series, of which this is the third volume, aims, so its editor, Sir John Lubbock, says, "to give on each subject the information which an intelligent layman might wish to possess." We can hardly imagine, however, that any layman, even an intelligent one, would be able to read this book understandingly unless he had had thorough instruction in vegetable anatomy. For example: the account of the course of the fibro-vascular bundles of the stem and their relation to the leaf traces (pp. 43-51) is hard reading even for one who has considerable previous knowledge of this subject both by reading and dissection. This fault, which can be considered a fault only in the light of the editor's preface, runs all through the book.

In these days when University Extension is coming to be such a popular thing we can foresee for this book a useful service. A course of lectures on the life history of plants could be built around it, and the book then be recommended for the supplementary reading which most of such courses require. The simplification and expansion by the lecturer would counterbalance the technicality and conciseness of Mr. Ward, qualities which under such circumstances become desirable. The number of books which can be used in this way is yet very limited and we are glad to recommend this one for this purpose to any who are wondering what they can find for such use.

The illustrations are in the main very good. Some are spoiled by too much reduction (e. g. those on pp. 57, 58, 59, and 111) and some are rather too large for the page, especially those in the chapter on the cultivation of the oak. The make up of the book is very attractive.

¹ WARD, H. MARSHALL:—The Oak, a popular introduction to forest-botany. Modern Science Series (edited by Sir John Lubbock) vol. III. 12mo. pp. vii + 175. New York: D. Appleton & Co. 1892. \$1.00.

Minor Notices.

MR. H. J. WEBBER has published an Appendix to the Catalogue of the Flora of Nebraska. The flora of this very interesting state is being vigorously investigated, and as the somewhat arbitrary line between the eastern and western manuals runs through it, such a list as this appendix contains unusually affects their contents. The appendix adds 432 species to the original catalogue, and the recorded Nebraska flora now contains 48 protophytes, 115 zygophytes, 27 oöphytes, 808 carpophytes, 60 bryophytes, 19 pteridophytes, and 1245 phanerogams; in all 2322 species.

THE 23d Contribution from the Herbarium of Columbia College is entitled "The American Species of the Genus *Anemone* and the Genera which have been referred to it," by N. L. Britton. In this paper Dr. Britton reviews the various notions as to generic limitations, and casts in the weight of his authority against consolidation, regarding *Anemone* and *Pulsatilla* as worthy of being considered distinct genera. *Hepatica* and *Anemonella* are also kept distinct, the latter bearing the older generic name *Syndesmon* Hoffmg. In addition to these genera which are represented from North America, the other American genera, *Capethia* and *Barneoudia*, are considered. *Pulsatilla*, thus revived, contains two species, the old *Anemone patens*, var. *Nuttalliana*, appearing as *P. hirsutissima* (Pursh). *Anemone*, thus delimited, is credited with 28 species, 9 of which are confined to South America. Two new species of the United States are *A. Tetonensis* Porter, of Idaho, and *A. Lyallii* Britton, of the northwestern Pacific region.

NOTES AND NEWS.

A PRELIMINARY LIST of the mosses of Lancaster County, Penn., has been published by John K. Small of Lancaster, and enumerates 150 species.

MR. F. W. DEWART has been appointed general assistant in botany at the Missouri Botanical Garden *vice* Mr. Hitchcock, who has gone to Manhattan, Kans. His duties began March 1.

THE FEBRUARY NUMBER OF AGRICULTURAL SCIENCE contains two botanical articles: "Notes on the flora of Thunderhead Mountain, Tennessee," by T. H. Kearney, Jr., and "Some recent contributions to mycology," by F. L. Scribner.

PRESIDENT JOHN M. COULTER is lecturing to large University Extension classes in Evansville and New Albany, Indiana, and Louisville, Ky. Each course includes twelve lectures upon the general morphology and physiology of plants.